

REMARKS/DISCUSSION OF ISSUES

Summary

Claims 1-9 are pending in the application. Claims 1 and 3-8 are rejected. Claim 2 is objected to. Claim 9 is new.

Claims 1, 3, 4 and 6-8

Claims 1, 3, 4 and 6-8 are finally rejected under 35 U.S.C. 103(a) as being unpatentable over Willson in view of Fermgard.

Willson discloses an apparatus which includes a linear array of LEDs (5) mounted on and electrically connected to a printed circuit board (4).

Willson does not teach or suggest protecting the LED mounting (5) and electric contacts by a package of hot melt material.

Fermgard discloses an electric pen including an LED (20) mounted on the pen in a position to illuminate the work surface. See, e.g., Fig. 6. The LED 20 is inserted into a mounting hole (21) and is fixed by means of glue, for instance hot melt adhesive. See para. [0052].

Fermgard fails to teach or suggest any electric connection wires for the LED, nor does the reference teach or suggest mounting of the LED on a base, nor protecting an LED mounting and electric contacts to connection wires by a package of hot melt material.

Thus, the combination of Willson and Fermgard fails to teach or suggest protecting an LED mounting and electric contacts to connection wires by a package of hot melt material,

as specifically called for by claim 1.

In response to the above arguments, the Examiner has stated that since the hot melt (of Fermgard) is securing the LED it would be inherently protecting the diode from damage caused by its shifting around inside the pen.

However, Applicant's claim 1 does not call for protection of the diode from shifting around inside a pen. Applicant's claim 1 calls for an LED mounted with a mounting on a base, which base is provided with electric connection wires wherein the LED mounting and electric contacts to the connection wires are protected from the surroundings by a package of hot melt material.

Fermgard does not teach or suggest that the LED (20) is mounted on a base, or that an LED base is provided with connection wires, or that the LED mounting and contacts to the connection wires are protected by a hot melt package.

Fermgard only teaches that:

The light-emitting diode 20 is inserted into the third mounting hole 21. The positioning is controlled by means of line contact between the light-emitting diode 20 and the two outer angled walls 21a, 21c. As a result, the light-emitting diode is safely mounted and cannot be angled from its correct position in the third mounting hole 21. The third mounting hole 21 has three inclined walls 21a, 21b, 21c, and the safe positioning is achieved by means of line contact with at least, and preferably, two of these. The light-emitting diode is fixed by means of glue, for instance hot melt adhesive. Para. [0052]

Thus, Fermgard's LED is mounted in a hole (21), not on a base. There is no mention of a base, or of electrical contacts on the base, or of a hot melt package protecting such a base and/or contacts. As acknowledged by the Examiner, Fermgard does not even teach where the hot melt is to be applied.

Fermgard does make clear that the LED is safely mounted

and cannot be shifted from its correct position in the hole due to the angled walls. Thus, the glue does not protect the LED from shifting in the pen, but only fixes the LED.

Since Willson only discloses LEDs mounted on and electrically connected to a circuit board, and since Fermgard only teaches mounting an LED in a hole, and fixing the LED with glue, and does not suggest the use of a hot melt glue package to protect an LED mounting and electrical contacts on a base, it would not have been obvious to the skilled artisan to provide an LED mounted on a base with electrical contacts, and a hot melt package protecting the LED mounting and contacts.

Claim 6

Regarding claim 6, the Examiner has acknowledged that Fermgard does not teach where the hot melt is to be applied, but states that it would have been obvious to only apply it in the front so as to have access to the wires in the back.

In order for a combination of references to succeed in an obviousness rejection under section 103, at least one of the references must contain some teaching or suggestion which would lead the skilled artisan to the claimed invention. Otherwise, the invention is only obvious in view of hindsight gained from Applicant's own teachings, and such hindsight is not permitted in judging obviousness under section 103.

Since neither of the cited references teach or suggest where the hot melt is to be applied, claim 6 is patentable over them.

Accordingly, claims 1, 3, 4 and 6-8 are patentable over the combination of Willson and Fermgard, and the rejection is in error and should be withdrawn.

Claim 5

Claim 5 is finally rejected under 35 U.S.C. 103(a) as being unpatentable over Willson and Fermgard in view of Epstein.

Epstein discloses an optical component with a self-adhering diffuser 8, preferably which scatters, or diffuses, light primarily in the forward direction, that is to say the general direction of incident light transmission, and scatters a relatively small amount of light in the backward direction. The self-adhering transfer diffuser may be constructed of a hot-melt adhesive, having diffusion properties incorporated therein. See cols. 3 and 4 of the reference.

In contrast to the teachings of Epstein, in which the diffuser 8 scatters light both forwards and backwards, Applicant's claim 5 calls for the hot melt material to have a white, light scattering surface. As generally understood, a white surface is not transmissive, but is reflective.

In response to this argument, the Examiner has stated that claim 5 only calls for the surface to be light scattering, not reflective, and Epstein's diffuser scatters light.

However, Epstein does not teach or suggest a white surface.

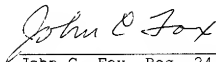
Accordingly, claim 5 is not obvious over Willson and Fermgard in view of Epstein, and the rejection is in error and should be withdrawn.

Claim 2 is objected to as being dependent on a rejected base claim. New claim 9 is presented which incorporates the limitations of claims 1 and 2.

However, in view of the above arguments and amendments, it is felt that all of the claims are in allowable form, and Applicant respectfully requests that the Examiner withdraw the

rejections of record, allow all the pending claims, and find the application to be otherwise in condition for allowance.

Respectfully submitted,

A handwritten signature in cursive script that reads "John C. Fox". The signature is written in dark ink and is positioned above a horizontal line.

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